

# RSPO Roundtable on Sustainable Palm Oil RT9

23 November 2011, Kota Kinabalu

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Actions and Initiatives:

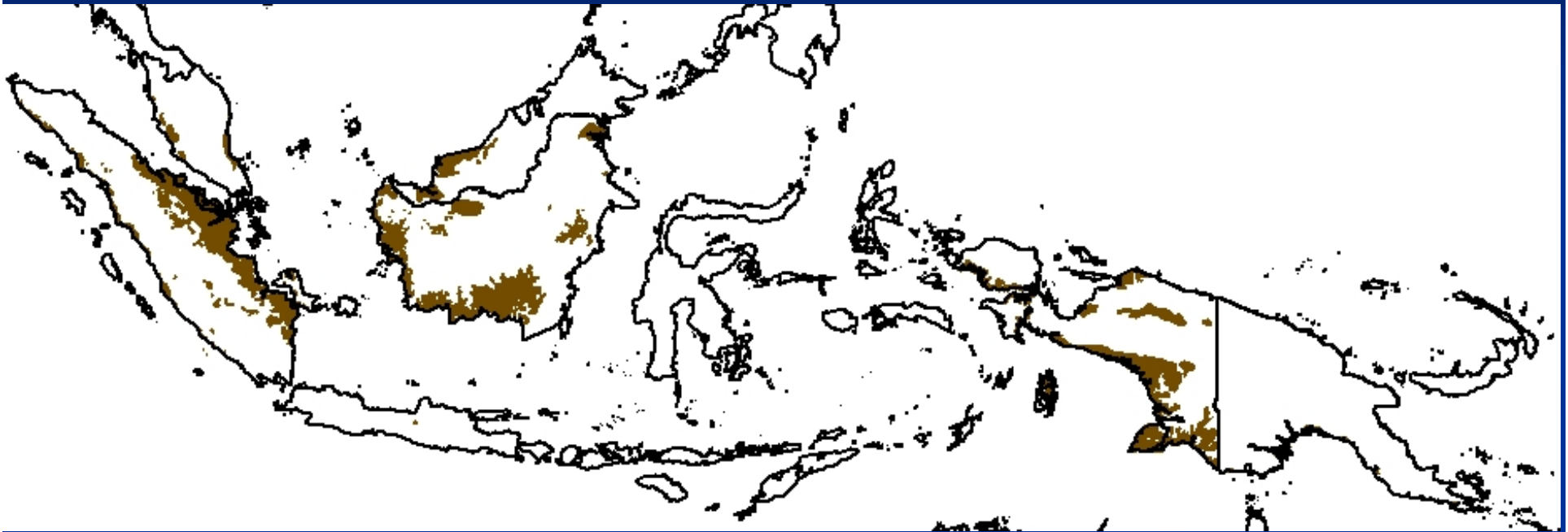
Peat BMP

RSPO Peatland Working Group

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Peter Lim (TH Plantations) Arina Schrier (WI)

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# Peatlands cover 25 million ha in Se Asia



Source: Sarvision

RPEA  
:



ASEAN Peatland Forests Project (APFP)





Increasing areas oil palm cultivated on peat (2.4 Million ha – 26% Malaysia/73% Indonesia)





# Sustainability of oil Palm cultivation on peat

## ■ Challenges

- Water management
- Fire prevention
- Subsidence
- Agronomy
- Peat and diseases
- GHG emissions/Env impacts

- RSPO P&C propose minimization of plantations on fragile soil (including peatlands) as well as adoption of BMP and measures to reduce GHG emissions.
- RSPO General Assembly November 2009 – approved establishment of a Working Group to provide guidance on **existing** oil palm cultivation on peat



# PLWG Members and Meetings

- 20 members from Growers and NGOs and experts
- Six meetings April 2010 to September 2011
- Site visits: Malaysia (Selangor and Sarawak) and Indonesia (Riau)
- Stakeholder workshops, Sarawak, Riau and Kuala Lumpur January – August 2011 (200 participants)

# Main Progress/Products

- Review of Environmental and Social Impacts
- Guidance for monitoring of GHG emissions from OPP and BMP on peat
- BMP Manual for OPP on Peat
- BMP manual on rehabilitation and maintenance of natural vegetation associated with OPP on peatlands..



# Accumulated subsidence

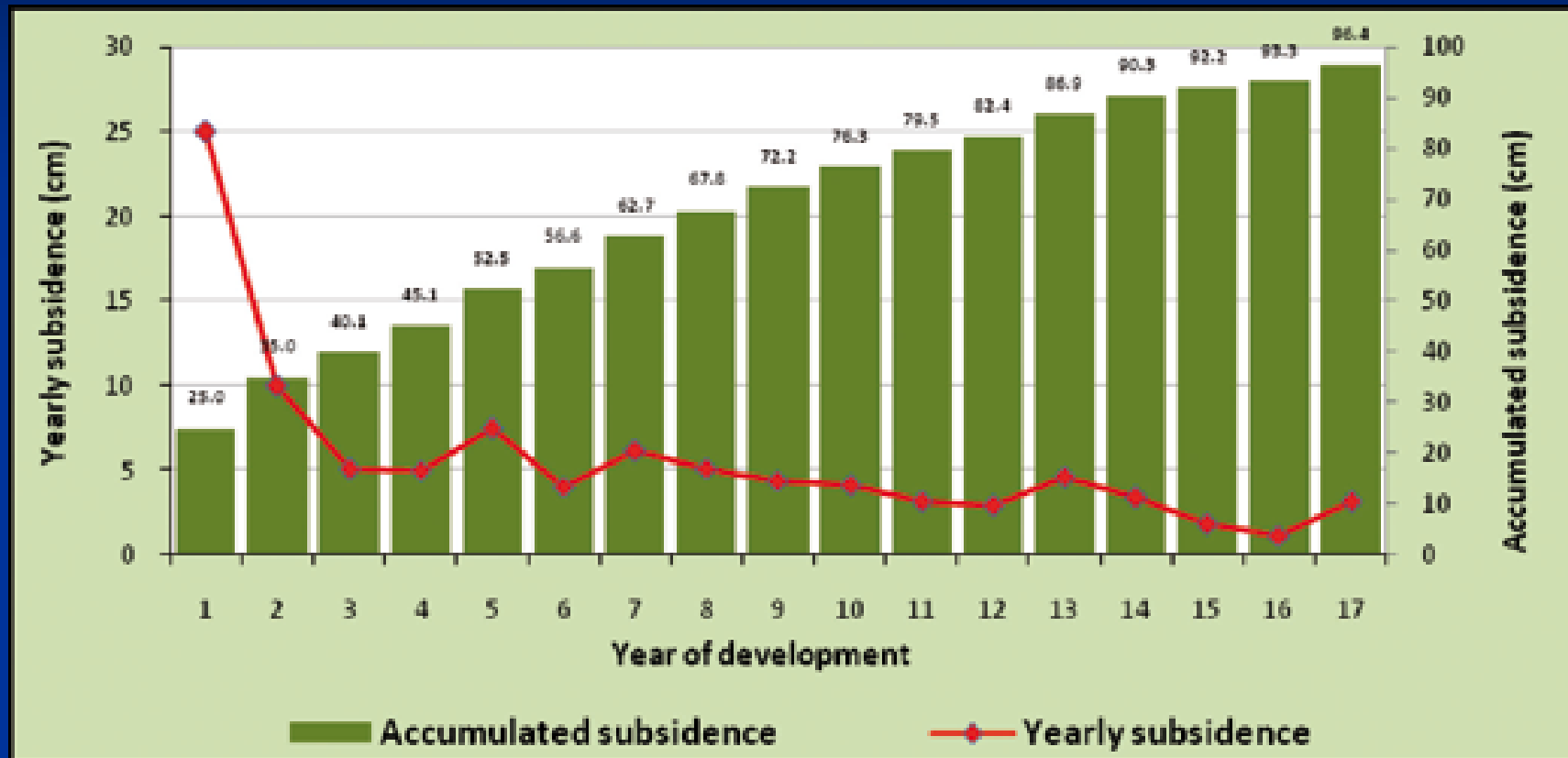


Figure 6. Yearly average and accumulated peat subsidence in the study area.

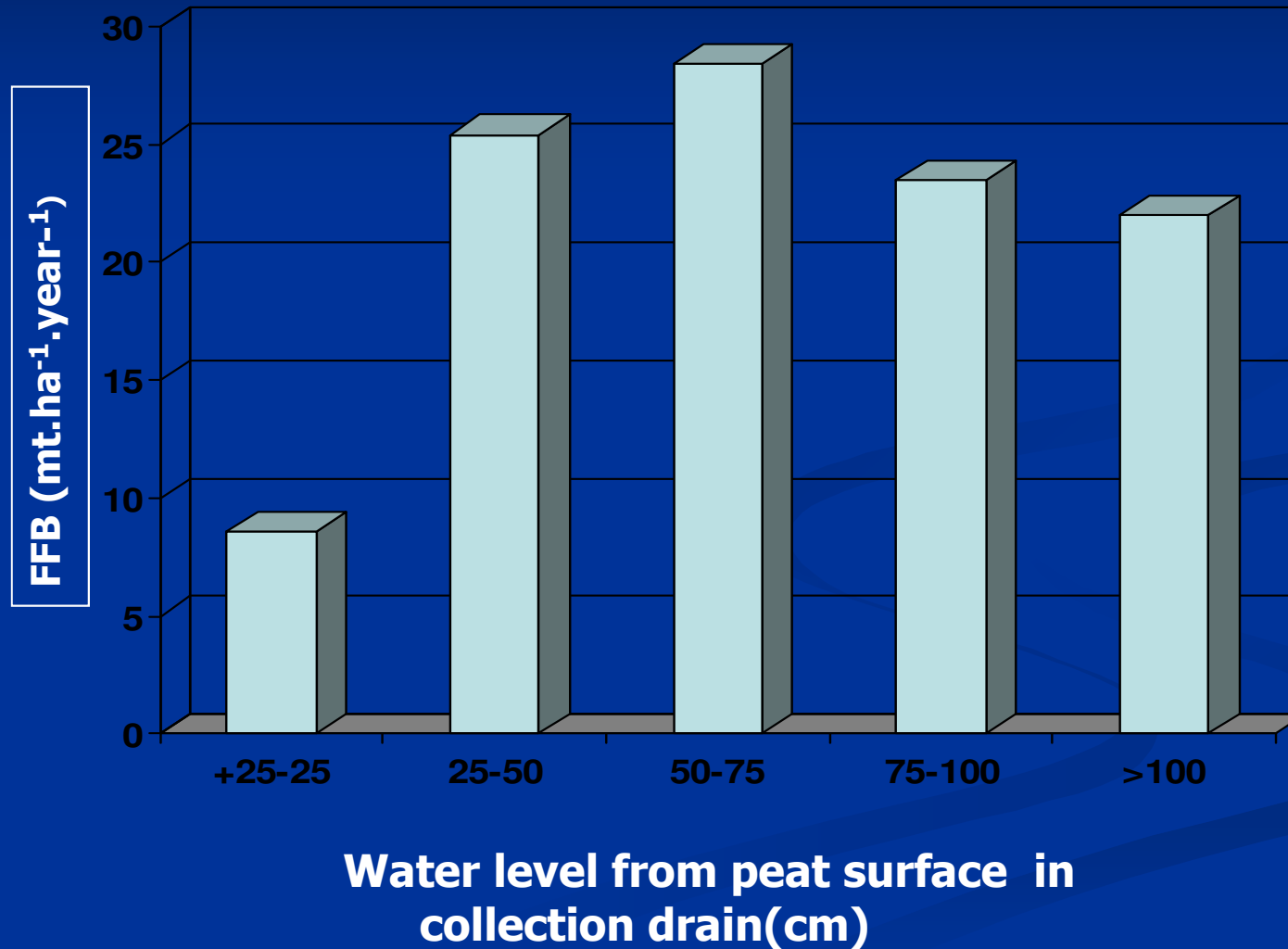




**Area with no compaction and with shallow planting, result in haphazard leaning of palms.**



## FFB YIELDS (1998 PLANTING) IN RELATION TO WATER LEVEL IN A PEAT ESTATE IN RIAU, SUMATRA.





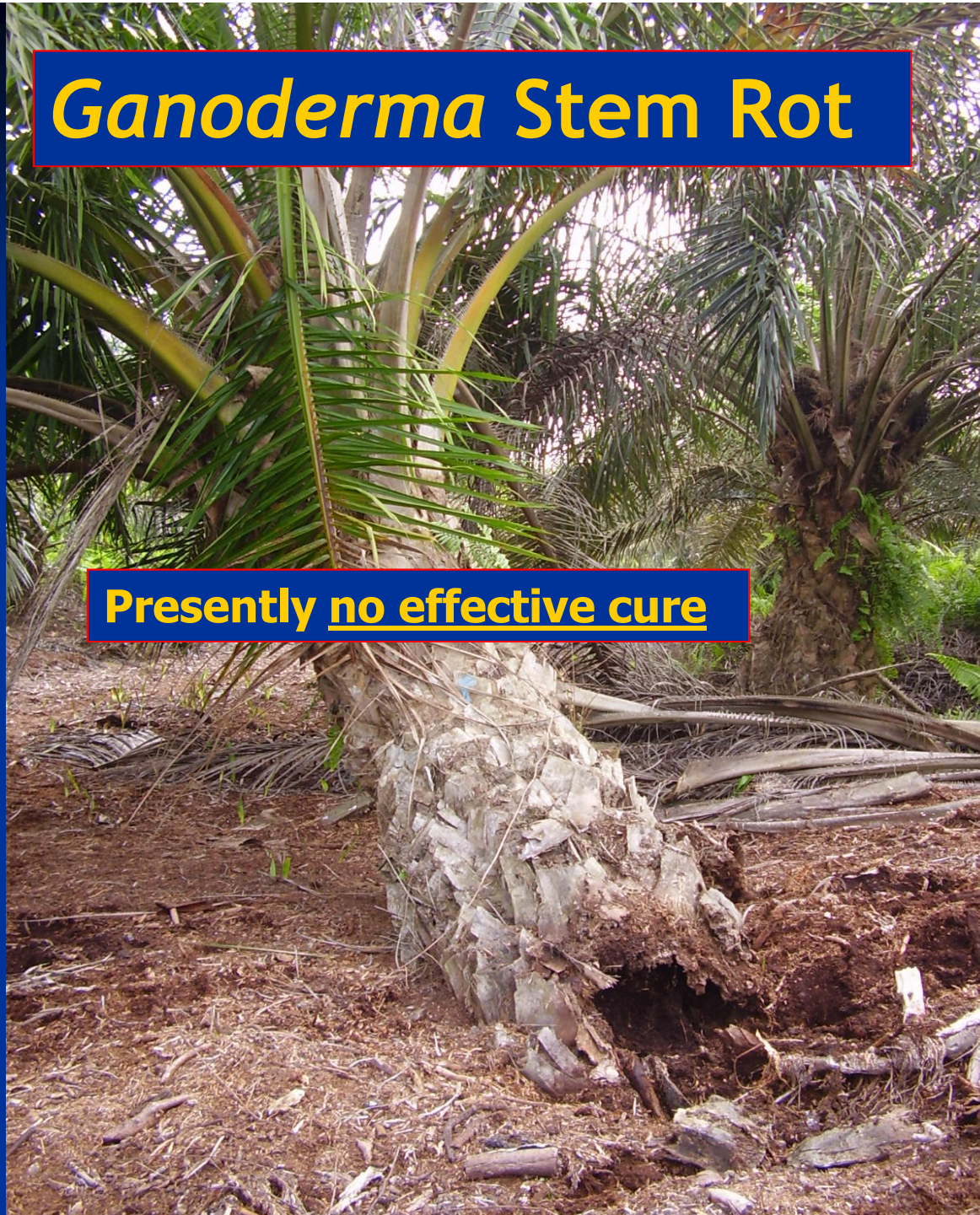
**WATER RETENTION ALONG COLLECTION  
DRAINS (one stop-off for every 20 cm difference  
in water level)**





# *Ganoderma* Stem Rot

Presently no effective cure





## TERMITE CONTROL - *Coptotermes curvignatus*





# Management of HCV and Buffer zones

- Essential to maintain a natural or near natural water regime in HCV/buffer areas.
- Maintain connectivity to rivers and streams
- Adequate width for river corridors
- Conserve deep peat/domes to support maintenance of groundwater levels.
- Block abandoned drains and canals

# Low level boundary canal leads to forest degradation and fire





# High level boundary ditch maintains forest and prevents fire





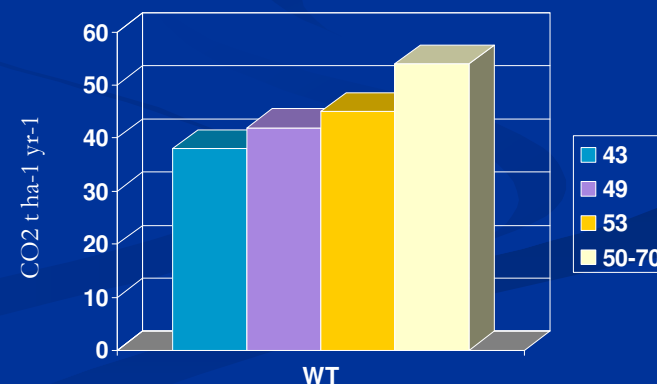
# Recommendations for sustainable low-carbon Plantations

## New plantation land:

- Development on mineral soil and non-peat/low carbon degraded land
  - emission reduction 70-80%
  - Reducing net landscape emissions – integrated management of peat basins.

## Existing plantations on peat: Introduction of BMP:

- Good water management (= key factor!)
  - drainage depth av. 50 cm (40-60 cm) in field
  - emission reduction > 40%
- Fire prevention and fire control, zero burning
- Compaction, vegetation cover on bare soil
- Reduce inorganic fertilisers
- Enhancing yield/ha



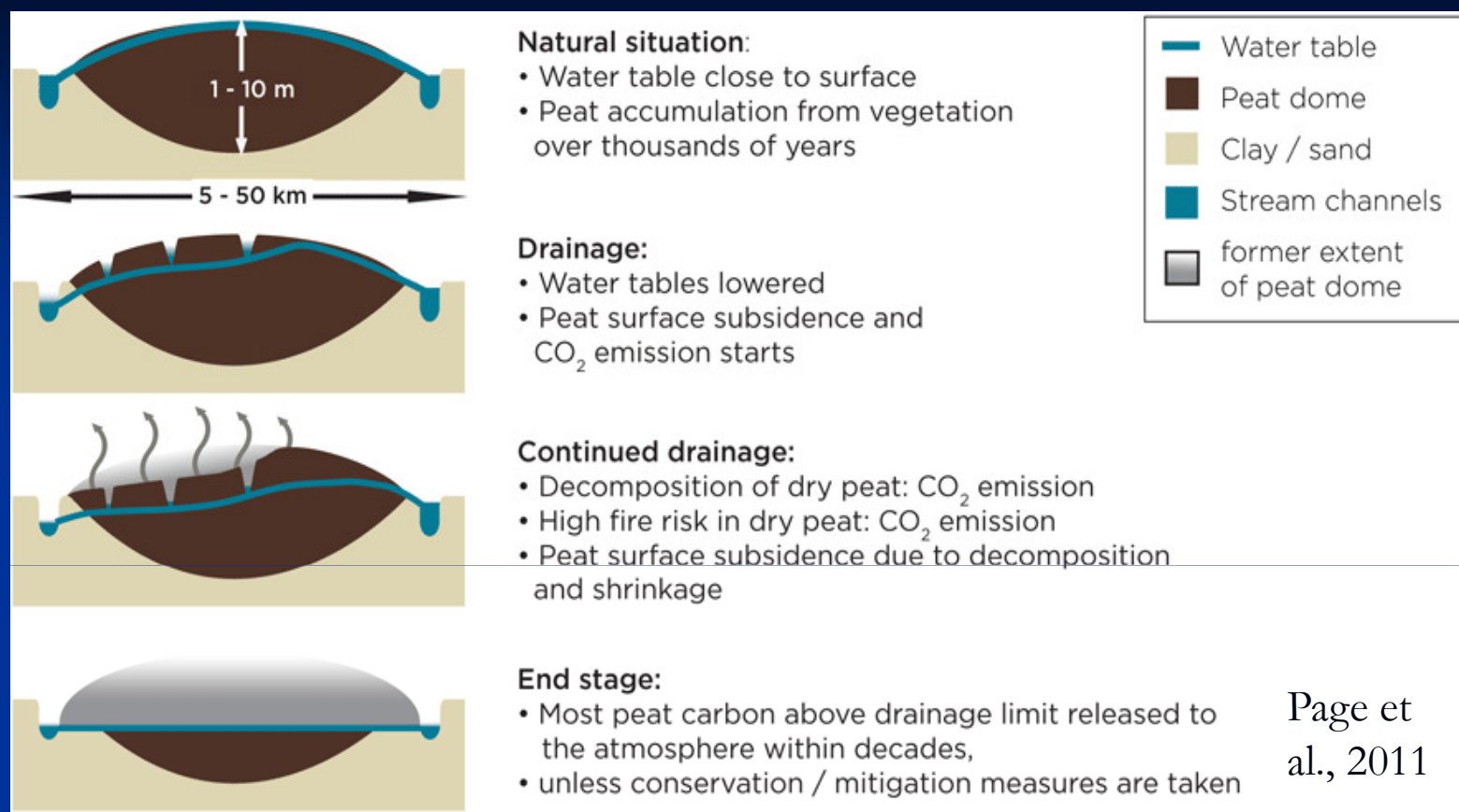
MPOB, Mohammed et al., 2009

# Other emission reduction options

- Ground cover maintenance
- Soil compaction before planting
- minimise inorganic fertiliser use,
- Stop use of fertiliser in rainy periods
- maintenance of HCVF and buffer zones



# Long term drainage impacts – replanting



- With current drainage many coastal sites may become undrainable within 25-75 years. Other sites may be underlain with acid-sulphate soils
- Pre-replanting assessment to determine optimal plan possible switch to wet-agroforestry

# Recommendations

- All RSPO members should use the best practice guidance for all existing plantations on peat
- Changes/improvements in practice should be documented and impacts monitored and reported
- Good practice demonstration/pilot sites should be designated by members to benchmark standards
- Further development of oil palm plantations on intact, forested peatlands should be avoided







## Next steps

- Promotion of BMP – training and outreach materials
- Further guidance should be developed for smallholders
- The RSPO PLWG should continue work to support and monitor BMP implementation.
- REQUEST any RSPO members with existing peat areas to contact the group to participate in implementation and monitoring



# Thank you



**Livelihood in Sumatera Indonesia**